


<b>AD-A236 413</b> 			<b>ITATION PAGE</b>		Form Approved OMB No. 0704-0188	
1a. REPORT Unclassified			1b. RESTRICTIVE MARKINGS			
2a. SECURITY			3. DISTRIBUTION / AVAILABILITY OF REPORT			
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE			5. MONITORING ORGANIZATION REPORT NUMBER(S)			
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6c. ADDRESS (City, State, and ZIP Code) U.S. Army Armament Research Development Engineering Center Picatinny Arsenal, NJ 07806-5000			9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER			
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11. TITLE (Include Security Classification) Performance Oriented Packaging Testing of Cartridge, Linked 25mm Ammunition Packed (50) Rounds per Wood Box		WORK UNIT ACCESSION NO.				
12. PERSONAL AUTHOR(S) Michael W. Selk						
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FIELD	GROUP	SUB-GROUP	Performance Oriented Packaging, POP, 25mm Wood Container			
19. ABSTRACT (Continue on reverse if necessary and identify by block number)						
This report contains the testing and test results performed on the Linked 25mm cartridges. Packed 50 rounds per wood box.						
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT <input type="checkbox"/> UNCLASSIFIED/UNLIMITED <input checked="" type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS				21. ABSTRACT SECURITY CLASSIFICATION Unclassified		
22a. NAME OF RESPONSIBLE INDIVIDUAL Michael W. Selk				22b. TELEPHONE (Include Area Code) 201-724-2330		22c. OFFICE SYMBOL SMCAR-AEP

**I**

II

**AUTHOR:**

PERFORM

**ADDRESS:**

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1. DATA:

CONTAINER:

TYPE: BOX, WOOD  
UN CODE: 4C1  
SPECIFICATION NUMBER: MIL-B-2427  
MATERIAL: WOOD  
CAPACITY: 42.2 LITERS  
DIMENSIONS: 72.4cm x 24.8cm x 23.5cm (28 1/2" x 9 3/4" x 9 1/4")  
GROSS WEIGHT: 40 KG (88 LBS)

PRODUCT:

NAME: 25MM LINKED APDS-T M791 AMMUNITION  
DRAWING NUMBER: 12013533  
UNITED NATIONS NUMBER: 0339  
UNITED NATIONS PACKING GROUP: II  
UNITED NATIONS NOMENCLATURE: CARTRIDGES FOR WEAPONS, INERT  
PROJECTILE  
PHYSICAL STATE: SOLID  
AMOUNT PER CONTAINER: 50 ROUNDS W/ LINKS  
NSN: 1305-01-095-6014

NAME: 25MM LINKED HEI-T M792 AMMUNITION  
DRAWING NUMBER: 12013230  
UNITED NATIONS NUMBER: 0321  
UNITED NATIONS PACKING GROUP: II  
UNITED NATIONS NOMENCLATURE: CARTRIDGES FOR WEAPONS  
PHYSICAL STATE: SOLID  
AMOUNT PER CONTAINER: 50 ROUNDS W/ LINKS  
NSN: 1305-01-094-7016

NAME: 25MM LINKED TP-T M793 AMMUNITION  
DRAWING NUMBER: 12013224  
UNITED NATIONS NUMBER: 0339  
UNITED NATIONS PACKING GROUP: II  
UNITED NATIONS NOMENCLATURE: CARTRIDGES FOR WEAPONS, INERT  
PROJECTILE  
PHYSICAL STATE: SOLID  
AMOUNT PER CONTAINER: 50 ROUNDS W/ LINKS  
NSN: 1305-01-095-0248

NAME: 25MM LINKED HEI-T MK210 MODO AMMUNITION  
DRAWING NUMBER: 12013230  
UNITED NATIONS NUMBER: 0321  
UNITED NATIONS PACKING GROUP: II  
UNITED NATIONS NOMENCLATURE: CARTRIDGES FOR WEAPONS  
PHYSICAL STATE: SOLID  
AMOUNT PER CONTAINER: 50 ROUNDS W/ LINKS  
NSN: 1305-01-198-2191

NAME: 25MM LINKED TPDS-T M910 AMMUNITION  
DRAWING NUMBER: 12556500  
UNITED NATIONS NUMBER: 0328  
UNITED NATIONS PACKING GROUP: II  
UNITED NATIONS NOMENCLATURE: CARTRIDGES FOR WEAPONS, INERT  
PROJECTILE  
PHYSICAL STATE: SOLID  
AMOUNT PER CONTAINER: 50 ROUNDS W/ LINKS  
NSN: 1305-01-298-6414

## 2. BACKGROUND:

THIS REPORT CONTAINS THE TESTING AND TEST RESULTS PERFORMED ON LINKED 25MM AMMUNITION PACKED IN A WOOD BOX, MANUFACTURED IN ACCORDANCE WITH MIL-B-2427. FIFTY (50) CARTRIDGES WERE PACKED IN A FIBERBOARD BOX (12013704) AND THIS FIBERBOARD BOX WAS PACKED IN ONE WOOD BOX(12013704) ACCORDING TO DRAWING 12013671. THIS PACK IS SUBMITTED FOR PERFORMANCE ORIENTED PACKAGING CERTIFICATION.

## 3. TEST:

EACH OF THE THREE CONTAINERS TESTED WERE DROPPED SIX TIMES AT A HEIGHT .91 METERS (3 FEET) IN THE FOLLOWING ORIENTATIONS: TOP, BOTTOM, LONG SIDE (FRONT FACE), LEFT END, BOTTOM RIGHT EDGE, AND TOP LEFT REAR CORNER. IN ADDITION EACH OF THE THREE CONTAINERS WAS DROPPED ONCE AT A HEIGHT OF 2.1 METERS (7 FEET) ON ITS BASE IN LIEU OF UN REQUIREMENTS OF 1.2 METERS (4 FEET). THE CONTAINERS WERE DROPPED ON A REINFORCED CONCRETE SURFACE. THIS TEST IS MORE SEVERE THAN THE UN REQUIREMENTS AS THE CONTAINER EXPERIENCES MULTIPLE IMPACTS IN A VARIETY OF ORIENTATIONS AND IS ALSO DROPPED ONCE AT A HEIGHT OF 7 FEET EXCEEDING THE UN REQUIREMENT.

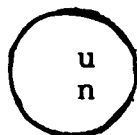
## 4. RESULTS:

THE CONTAINERS PASSED ALL TESTS SINCE NONE OF THE CONTENTS WERE DISCHARGED. THEY ARE CONSIDERED SAFE FOR INTERNATIONAL TRANSPORTATION IN ACCORDANCE WITH PERFORMANCE ORIENTED PACKAGING REGULATIONS.

## 5. REFERENCED MATERIAL:

A. FEDERAL REGISTER, "49 CFR PART 107, 1991"

6. BASED ON THE ABOVE EQUIVALENT POP TESTING, THE FOLLOWING POP SYMBOL HAS BEEN APPLIED TO CONTAINERS MANUFACTURED IAW DRAWING 12013671 & MIL-B-2427.



4C1/Y40/S/53 ——— LAST TWO DIGITS OF YEAR PACKED  
USA/DOD/AYD